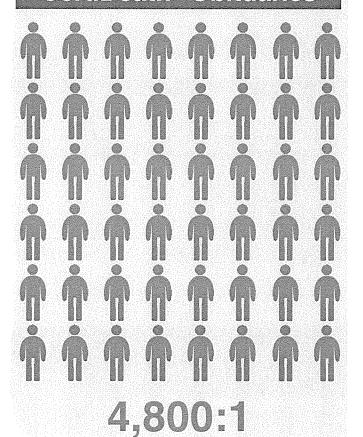
PBI CertiDeath® Intel: False Positives

CertiDeath Obituaries vs. Death Master File

As a comprehensive Death Audit solution, not just Death Data, CertiDeath identifies deaths via Obituaries, State Records, the Death Master File and Other Sources. As a result, CertiDeath provides unique insights into data used for death identification.

CertiDeath® Obituaries



One false positive for every 4,800 deaths identified via CertiDeath Obituaries.

Death Master File (DMF)

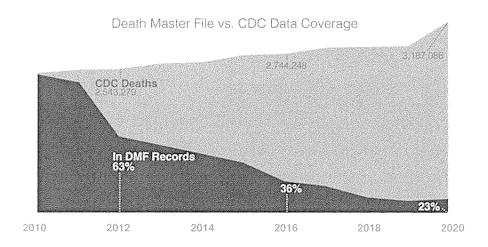
One false positive for every 211 deaths identified via DMF.



*Each person represents 100 records.

Preventing Short-Term Leakage while Identifying Long-Term Overpayments in Pension Funds

Pension funds can prevent leakage by identifying deaths that occur within their population in a more timely, efficient, and comprehensive manner than has ever been possible. Most are not aware of the new option that became available in 2019 and was tested during 2020 by hundreds of pension funds.



Identifying deaths has become more complex and expensive to pension funds.

- Understanding how complex death identification has become leads most funds to realize they are likely making other overpayments today, but they do not know how to identify them
- Growing Challenge This challenge continues to grow as the retirement population grows and ages. As pension payments increase this becomes more expensive

Obituary Data has become the single most important source of identifying deaths in a comprehensive and timely fashion. The challenge of matching obit data was traditionally passed to the pension fund.

- Obituary data comes from many sources (Funeral Homes, Newspapers, Tribute Sites, Memorial Sites, Social Media sites)
- is challenging to gather and utilize effectively for several reasons (names change, nicknames, locations aren't accurate, DOB errors)

Vendors are also challenged to surface all the potential obituary matches. Everyone, except PBI, is relying on a 3rd party to provide the information.

- All other vendors simply score best guesses of obit matches and send to their clients to spend time reviewing and determining if there is a match
- This process creates risk of missed deaths, or miss-classified deaths

Percentage of Deaths Identified by Source 2020 15% State Records 23% SSA Death Master File 62% Obituaries

Obituary data typically surfaces in 1 week

SSA DMF and State Records often take 3 weeks

2018 - 2019 Obituary data source evolution, understanding customer needs

In 2018, understanding the importance of obituary data, PBI began expanding database access. Increased from 3,000 to over 26,000 Databases.

- Expanded databases plus improved technology meant a larger pool of potential matches
- Most clients were only reviewing the top scoring matches and were missing deaths

It became clear a new solution was necessary.

2019 - 2020 A.I. Technology and Human Expertise

Understanding pension funds have a serious set of challenges and a need for a complete, accurate, and fast answer to death matches, PBI now had the ability to complete this task for them.

- Prior to 2019 PBI's standard data solution was best in the industry, but clients still had to look through it to validate matches
- Released in 2019, the new full death audit solution with PBI's expert team validating the data provides a complete, accurate, and timely result for death identification

PBI's provide a full picture while minimizing the risk involved with clients processing potential death data "guesses" PBI worked to create a solution.

- Became <u>the only vendor</u> that is data independent for obituaries (no 3rd party reliance)
- Grew proprietary database, currently over 26,000 sources and PBI continues to invest and grow
- Developed A.I. technology, advanced algorithms to capture full potential
- Staffed the largest (and only) team of data scientists in the industry to continue to adjust algorithms as we gain feedback

• Became <u>the only vendor</u> to use human expertise for validation – PBI's growing team is in 3 offices across the country

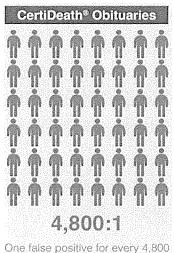
Understanding Results of the New Solution

Hundreds of clients were interested in trying the new solution in 2019 and 2020.

- Those that recognized the value of finding any long-standing overpayments (and possibly reclaiming funds for the pension)
- Preventing overpayments before they happened
- Wanting to re-purpose staff hours to focus on other valuable activities

Early projections and testing indicated PBI could get a very good validation result. But what we learned from the first full calendar year with many clients using the solution helped everyone understand how powerful this is.

- Measuring the results against files using obituary data and their own internal processes, it was
 easy to see there a gap in results that PBI could fill
- Additionally, we learned that our validation results from obituaries was significantly better than the matches that come from the SSA DMF
- 2020 results: 99.9% <u>obituary</u> validation accuracy
- 22x more likely to receive False Positive from SSA DMF
- CertiDeath® <u>Revival Report</u> gives clients insight to proactively manage SSA DMF False Positives



deaths identified via CertiDeath Obituaries. Death Master File (DMF)

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One false positive for every 211 deaths identified via DMF

The new solution has proven to provide more deaths, in less time, and without time and effort spent by client's staff to complete any validation. Pension funds can now simply move on to the next step in their process. 95% of deaths identifies, 99% accuracy

CertiDeath® Death Audit – The only true death audit solution

- Includes DMF, State Records, and over 26,000 sources Proprietary Database
- · Validated death audit results delivered in a weekly report no data to verify
- PBI experts validate results and post only the answers (includes complex obit reviews)
- 95% of deaths delivered nationwide, 99% accuracy on validation

While obituary review is increasing and becoming more complex, your workload is minimized, and your pension fund is more accurate on a timely basis.

Source	Methodology	% Death ID'd
Pre - 2011 DMF	Death Audit	95%
CertiDeath*	Death Audit	95%
DMF + State + Obits	Death Data	70%
DMF + State	Death Data	59%
DMF	Death Data	23%

Please contact Jeff Anderson with questions, to have a free file analysis completed, or to get started with service.

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